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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,852	11/28/2001	Hizuru Nawata	DP-828 US	5417
466	7590	06/29/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			NGUYEN, TU X	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/994,852

Applicant(s)

NAWATA, HIZURU

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 8-10, 13-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 7, 11, 12, 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Information Disclosure Statement*

There are missing Information Disclosure Statements, please send in another copies for the examiner to take consideration.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4, 6, 13-15 and 17, are rejected under 35 U.S.C. 102(e) as being anticipate by Yuzawa (US Pub. 2004/0073945).

Regarding claims 1 and 14-15, Yuzawa discloses a digital satellite (see par.002) communications system for communicating data between a HUB station and a plurality of VSATs (Very Small Aperture Terminals) or between the VSATs via a communications satellite, wherein each VSAT (see 111-14, fig.7) comprises:

a digital signal processing means for demodulating signals which are received by the VSAT (3, fig.1);

nonvolatile memory for storing a default program for letting the digital signal processing means execute signal demodulation at start-up of the VSAT (see par.0040, 0049);

rewritable memory for storing an operation program for letting the digital signal processing means execute signal demodulation after the start-up of the VSAT (see par.0040, 0049);

an operation program download means for obtaining the operation program by downloading the operation program from the HUB station (see par.0039);

an error check/rewriting means for conducting error check to the operation program downloaded from the HUB station until an errorless operation program is obtained by the download and storing the errorless operation program in the rewritable memory (see par.0036); and

a switching control means for switching a program which is loaded into and used by the digital signal processing means from the default program to the operation program (see par.0045).

Regarding claim 2, Yuzawa discloses the VSAT further comprises a reception logic means for detecting data reception from the HUB station at the start-up of the VSAT based on demodulating operation of the digital signal processing means (see par.0049), and

the switching control means executes the switching of the program from the default program to the operation program when the reception logic means detected the data reception from the HUB station (see par.0043).

Regarding claims 4 and 17, Yuzawa discloses the VSAT further includes a version comparison means for comparing the version of an up-to-date operation program that can be downloaded from the HUB station with the version of the operation

program which has been stored in the rewritable memory and making a request to the HUB station for the download of the up-to-date operation program so that the operation program will be replaced with the up-to-date operation program if the versions of the programs did not match (see par.0046).

Regarding claim 6, Yuzawa discloses wherein the version comparison means is implemented by a CPU (see 20, fig.1 and par.0046 "unit controller" corresponds to CPU).

Regarding claim 13, Yuzawa discloses the error check/rewriting means is implemented by a CPU (see par.0046).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuzawa in view of Dutta (US Patent 6,587,443).

Regarding claims 8-9, Yuzawa fails to disclose the digital signal processing means is implemented by a digital demodulator.

Dutta discloses the digital signal processing means is implemented by a digital demodulator (see col.11 lines 9-24). Therefore, It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify the system of Yuzawa with the above teaching of Dutta in order to provide .

5. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuzawa in view of Doi et al. (US Patent 6,148,215).

Regarding claim 10, Yuzawa fails to disclose the digital signal processing means is implemented by a digital demodulator having a clock regenerator.

Doi et al. disclose the digital signal processing means is implemented by a digital demodulator having a clock regenerator (see 12, 10 fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yuzawa with the above teaching of Doi et al. in order to provide a clock generator for generating a plurality of clock signals of different frequencies which are required by the DSP.

### ***Allowable Subject Matter***

6. Claims 3, 5, 7, 11-12, 16 and 18-19, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3 and 16, none of prior art teaching "the switching control means switches the program which is loaded into and used by the digital signal

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processing means from the operation program to the default program when reception synchronization between VSATs can not be established" as cited in the claim.

Regarding claims 5 and 18, none of prior art teaching "the version comparison means regularly conducts the version comparison between calls with other VSATs by referring to version data which is included in demodulated data which is obtained by demodulating signals transmitted from the HUB station" as cited in the claim.

Regarding claim 7, none of prior art teaching "the operation program download means downloads the operation program from the HUB station via a CSC (Common Signaling Channel) outbound channel between the HUB station and the VSAT" as cited in the claim.

Regarding claim 11, none of prior art teaching "the nonvolatile memory and the rewritable memory are provided to the VSAT for the exclusive use of the digital signal processing means" as cited in the claim.

Regarding claim 12, none of prior art teaching "the nonvolatile memory and the rewritable memory are shared by the digital signal processing means and other parts of the VSAT" as cited in the claim.

Regarding claim 19, none of prior art teaching "in the operation program download step: the download of the operation program is executed via a CSC (Common Signaling Channel) outbound channel between the HUB station and the VSAT" as cited in the claim.

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### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TN  
June 17, 2004

  
NAY MAUNG

SUPERVISORY PATENT EXAMINER